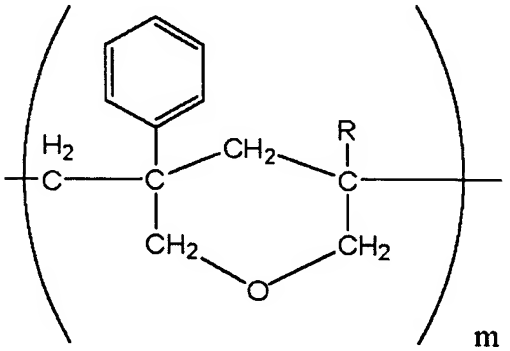
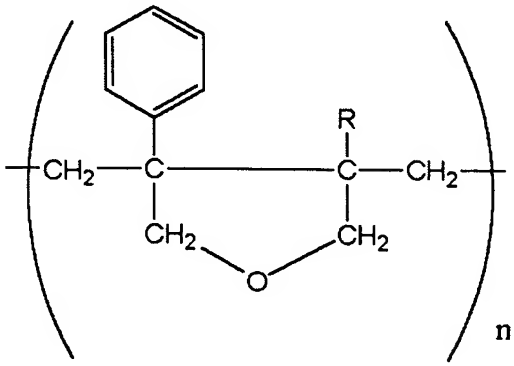
What is Claimed is:

1. An injection molded plastic magnetic recording medium substrate comprising a thermoplastic allyloxymethylstyrene type resin having either or both of a structural unit represented by general formula A and a structural unit represented by general formula B,



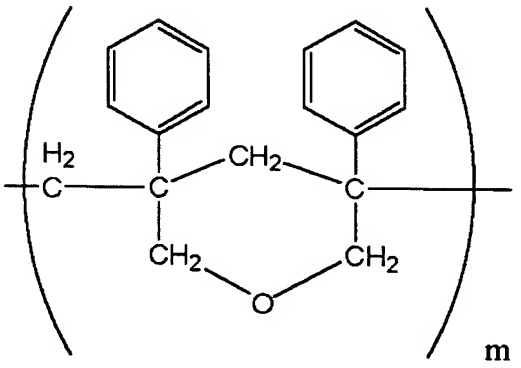
General formula A



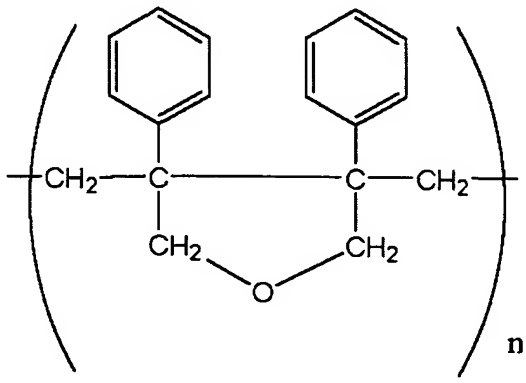
General formula B

where R is a group selected from hydrogen, alkyl groups, cycloalkyl groups, aryl groups and aromatic heterocyclic groups, and m and n each represent 0 or an integer of 1 or higher, with the proviso that m and n are not both 0.

2. The injection molded plastic magnetic recording medium substrate according to claim 1, wherein the thermoplastic allyloxymethylstyrene type resin includes a thermoplastic phenylallyloxymethylstyrene resin having either or both of a structural unit represented by general formula 1 and a structural unit represented by general formula 2,



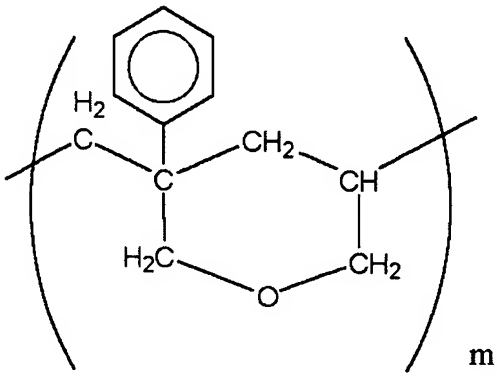
General formula 1



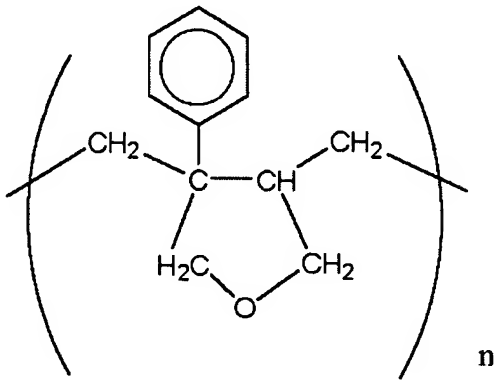
General formula 2

where m and n each represent 0 or an integer of 1 or higher, with the proviso that m and n are not both 0.

3. An injection molded plastic magnetic recording medium substrate comprising a thermoplastic allyloxymethylstyrene resin having either or both of a structural unit represented by general formula 3 and a structural unit represented by general formula 4,



General formula 3



General formula 4

where m and n each represent 0 or an integer of 1 or higher, with the proviso that m and n are not both 0.

4. The magnetic recording medium substrate according to claim 2, wherein the thermoplastic phenylallyloxymethylstyrene resin has a cyclization rate of at least 90%, a glass transition temperature (Tg) in a range of 180°C to 270°C, a thermal decomposition point of at least 360°C, and a moisture content of not more than 0.01%.

5. The magnetic recording medium substrate according to claim 3, wherein the thermoplastic allyloxymethylstyrene resin has a cyclization rate of at least 80%, a glass transition temperature (Tg) of at least 100°C, a thermal decomposition point of at least 350°C, and a moisture content of not more than 0.01%.

6. The magnetic recording medium substrate according to claim 1, wherein a flatness in a substrate surface radial direction is not more than 12 μm, a straightness is not more than 1.2 μm, a waviness (Wa) is not more than 50 nm, and an average roughness (Ra) is not more than 0.5 nm.

7. The magnetic recording medium substrate according to claim 2, wherein a flatness in a substrate surface radial direction is not more than 12 μm, a straightness is not more than 1.2 μm, a waviness (Wa) is not more than 50 nm, and an average roughness (Ra) is not more than 0.5 nm.

8. The magnetic recording medium substrate according to claim 3, wherein a flatness in a substrate surface radial direction is not more than 12 μm, a straightness is not more than 1.2 μm, a waviness (Wa) is not more than 50 nm, and an average roughness (Ra) is not more than 0.5 nm.

9. The magnetic recording medium substrate according to claim 2, wherein a substrate flatness shape change after exposure for 500 hours to a high-temperature high-humidity environment of 80°C and 80% RH is not more than 10%.

10. The magnetic recording medium substrate according to claim 4, wherein a substrate flatness shape change after exposure for 500 hours to a high-temperature high-humidity environment of 80°C and 80% RH is not more than 10%.

11. A magnetic recording medium comprising the substrate according to claim 1 and at least a magnetic layer, a protective layer, and a lubricant layer formed on the substrate.

12. A magnetic recording medium comprising the substrate according to claim 2 and at least a magnetic layer, a protective layer, and a lubricant layer formed on the substrate.

13. A magnetic recording medium comprising the substrate according to claim 3 and at least a magnetic layer, a protective layer, and a lubricant layer formed on the substrate.

14. The magnetic recording medium according to claim 11, wherein a flatness in a substrate surface radial direction is not more than 12 μm, a straightness is not more than 1.2 μm, a waviness (Wa) is not more than 50 nm, and an average roughness (Ra) is not more than 0.5 nm.

15. The magnetic recording medium according to claim 12, wherein a flatness in a substrate surface radial direction is not more than 12 μm, a straightness is not more than 1.2 μm, a waviness (Wa) is not more than 50 nm, and an average roughness (Ra) is not more than 0.5 nm.

16. The magnetic recording medium according to claim 13, wherein a flatness in a substrate surface radial direction is not more than 12 μm, a straightness is not more than 1.2 μm, a waviness (Wa) is not more than 50 nm, and an average roughness (Ra) is not more than 0.5 nm.

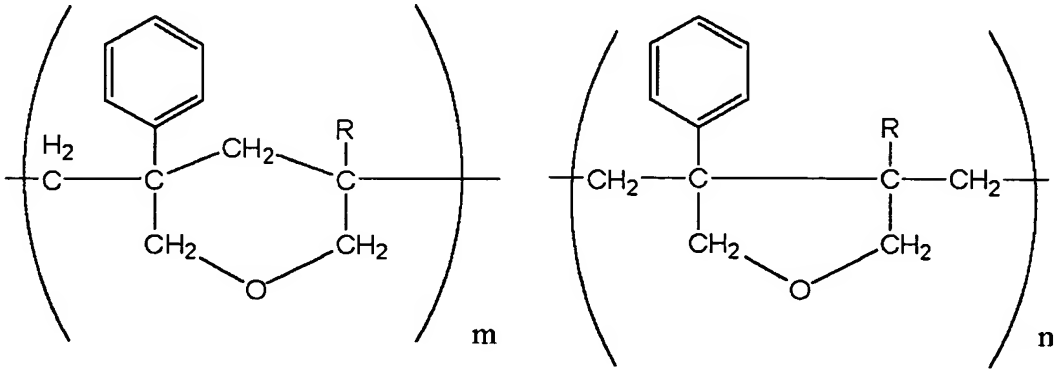
17. The magnetic recording medium according to claim 11, wherein a substrate flatness shape change after exposure for 500 hours to a high-temperature high-humidity environment of 80°C and 80% RH is not more than 10%.

18. The magnetic recording medium according to claim 12, wherein a substrate flatness shape change after exposure for 500 hours to a high-temperature high-humidity environment of 80°C and 80%RH is not more than 10%.

19. The magnetic recording medium according to claim 6, wherein a substrate flatness shape change after being left for 500 hours in a high-temperature high-humidity environment of 80°C and 80%RH is not more than 10%.

20. A method of manufacturing a magnetic recording medium comprising the steps of:

forming an injection molded plastic magnetic recording medium substrate comprising a thermoplastic allyloxymethylstyrene type resin having either or both of a structural unit represented by general formula A and a structural unit represented by general formula B,



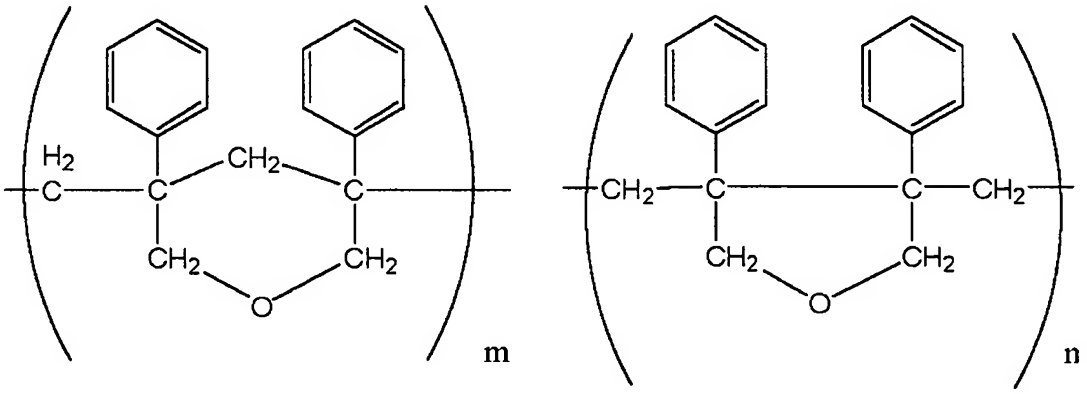
General formula A General formula B

where R is a group selected from hydrogen, alkyl groups, cycloalkyl groups, aryl groups and aromatic heterocyclic groups, and m and n each represent 0 or an integer of 1 or higher, with the proviso that m and n are not both 0, by thoroughly drying the thermoplastic allyloxymethylstyrene type resin and then injection molding the thermoplastic allyloxymethylstyrene type resin; and

forming at least a magnetic layer, a protective layer, and a lubricant layer in this order on the substrate.

21. A method of manufacturing a magnetic recording medium comprising the steps of:

forming an injection molded plastic magnetic recording medium substrate including a thermoplastic phenylallyloxymethylstyrene resin having either or both of a structural unit represented by general formula 1 and a structural unit represented by general formula 2,



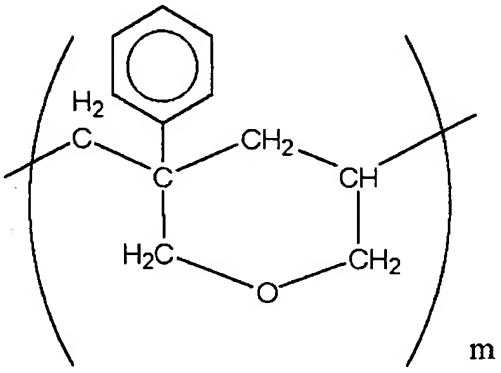
General formula 1 General formula 2

where m and n each represent 0 or an integer of 1 or higher, with the proviso that m and n are not both 0, by thoroughly drying the thermoplastic phenylallyloxymethylstyrene resin and then injection molding the thermoplastic phenylallyloxymethylstyrene resin; and

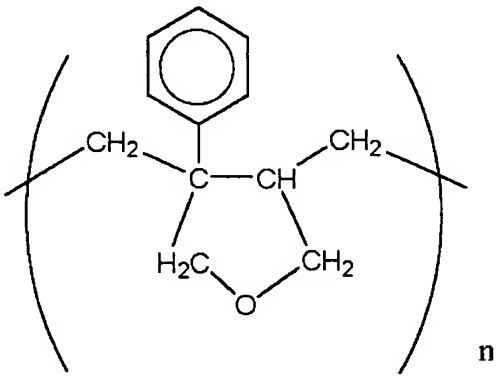
forming at least a magnetic layer, a protective layer, and a lubricant layer in this order on the substrate.

22. A method of manufacturing a magnetic recording medium comprising the steps of:

forming an injection molded plastic magnetic recording medium substrate comprising a thermoplastic allyloxymethylstyrene resin having either or both of a structural unit represented by general formula 3 and a structural unit represented by general formula 4,



General formula 3



General formula 4

where m and n each represent 0 or an integer of 1 or higher, with the proviso that m and n are not both 0, by thoroughly drying the thermoplastic allyloxymethylstyrene resin and then injection molding the thermoplastic allyloxymethylstyrene resin; and

forming at least a magnetic layer, a protective layer, and a lubricant layer in this order on the substrate.